Journal of Atmospheric Chemistry **13** (1991).

Contents to Volume 13

Volume 13 No. 1 July 1991

RANDAL S. MARTIN, HAL WESTBERG, EUGENE ALLWINE, LYNNE ASHMAN, J. CARL FARMER, and BRIAN LAMB / Measurement of Isoprene and its Atmospheric Oxidation Products in a Central Pennsylvania Deciduous Forest 1

O. MÖHLER and F. ARNOLD / Flow Reactor and Triple Quadrupole Mass Spectrometer Investigations of Negative Ion Reactions involving Nitric Acid: Implications for Atmospheric HNO_3 Detection by Chemical Ionization Mass Spectrometry 33

W. R. HARTMANN, M. SANTANA, M. HERMOSO, M. O. ANDREAE, and E. SANHUEZA / Diurnal Cycles of Formic and Acetic Acids in the Northern Part of the Guayana Shield, Venezuela 63

N. MIHALOPOULOS, J. P. PUTAUD, B. C. NGUYEN, and S. BELVISO / Annual Variation of Atmospheric Carbonyl Sulfide in the Marine Atmosphere in the Southern Indian Ocean 73

DAVID POST, HOWARD A. BRIDGMAN, and G. P. AYERS / Fog and Rainwater Composition in Rural SE Australia 83

F.-J. LÜBKEN, R. ENG, D. R. KARECKI, G. I. MACKAY, S. NADLER, and H. I. SCHIFF / The Effect of Water Vapour Broadening on Methane Eddy Correlation Flux Measurements 97

Volume 13 No. 2 August 1991

XING LIN and WILLIAM L. CHAMEIDES / Model Studies of the Impact of Chemical Inhomogeneity on SO_2 Oxidation in Warm Stratiform Clouds 109

A. P. ALTSHULLER / Estimating Product Yields of Carbon-Containing Products from the Atmospheric Photooxidation of Ambient Air Alkenes 131

A. P. ALTSHULLER / The Production of Carbon Monoxide by the Homogeneous NO_x-Induced Photooxidation of Volatile Organic Compounds in the Troposphere 155

U. WILLE, E. BECKER, R. N. SCHINDLER, I. T. LANCAR, G. POULET, and G. LE BRAS / A Discharge Flow Mass-Spectrometric Study of the Reaction Between the NO_3 Radical and Isoprene 183

ROGER ATKINSON and WILLIAM P. L. CARTER / Reactions of Alkoxy Radicals Under Atmospheric Conditions: The Relative Importance of Decomposition Versus Reaction with O_2 195

Volume 13 No. 3 October 1991

SCOTT ELLIOTT, RICHARD P. TURCO, OWEN B. TOON, and PATRICK HAMILL / Application of Physical Adsorption Thermodynamics to Heterogeneous Chemistry on Polar Stratospheric Clouds 211

J. LANGNER and H. RODHE / A Global Three-Dimensional Model of the Tropospheric Sulfur Cycle 225

GERHARD KRAMM, HANS MÜLLER, DAVID FOWLER, KLAUS D. HÖFKEN, FRANZ X. MEIXNER, and EBERHARD SCHALLER / A Modified Profile Method for Determining the Vertical Fluxes of NO, NO_2, Ozone, and HNO_3 in the Atmospheric Surface Layer 265

DIDIER GILLOTAY and PAUL C. SIMON / Temperature-Dependence of Ultraviolet Absorption Cross-Sections of Alternative Chlorofluoroethanes: 2. The 2-chloro-1,1,1,2-tetrafluoroethane – HCFC-124 289

T. ZHU, I. BARNES, and K. H. BECKER / Relative-Rate Study of the Gas-Phase Reaction of Hydroxy Radicals with Difunctional Organic Nitrates at 298 K and Atmospheric Pressure 301

Book Review:
V. A. Isidorov: *Organic Chemistry of the Earth's Atmosphere*
(A. HOFZUMAHAUS) 313

Volume 13 No. 4 November 1991

ELISABET FOGELQVIST and MIKAEL KRYSELL / Naturally and Anthropogenically Produced Bromoform in the Kattegatt, a Semi-Enclosed Oceanic Basin 315

O. KLEMM and R. W. TALBOT / A Sensitive Method for Measuring Atmospheric Concentrations of Sulfur Dioxide 325

GERASSIMOS MINESHOS, NIKOLAOS ROUMELIS, EFTHALIA EVMORFOPOULOU, and SOTIRIOS GLAVAS / Nitric Acid Forming Potential of Five Prototype Hydrocarbons 343

R. ZANDER, C. P. RINSLAND, D. H. EHHALT, J. RUDOLPH, and PH. DEMOULIN / Vertical Column Abundances and Seasonal Cycle of Acetylene, C_2H_2, above the Jungfraujoch Station, Derived from IR Solar Observations 359

D. J. LARY and J. A. PYLE / Diffuse Radiation, Twilight, and Photochemistry – I 373

D. J. LARY and J. A. PYLE / Diffuse Radiation, Twilight, and Photochemistry – II 393